

Amendments to Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) A method of modifying an activity of at least one human or avian hnRNP A protein within at least one cell, which comprises the steps of:

introducing into the cell a plurality of RNA polynucleotide sequences comprising consisting essentially of FGFR2 exon 8 sequences capable of binding to the hnRNP A protein; and

interacting the RNA polynucleotide sequences with the hnRNP A protein within the cell, wherein the RNA polynucleotide sequences compete with at least one endogenous RNA sequence for interacting with the hnRNP A protein.

2. (previously presented) The method of Claim 1, wherein the polynucleotide sequences are introduced into the cell by electroporation.

3. (previously presented) The method of Claim 1, wherein the polynucleotide sequences are introduced into the cell by applying the polynucleotide sequences to a surface of the cell.

4. (previously presented) The method of Claim 3, wherein the polynucleotide sequences are packaged in at least one liposome.

5. (previously presented) The method of Claim 3, wherein the polynucleotide sequences are applied to a surface of the cell along with a detergent.

6. (previously presented) The method of Claim 1, wherein the cell is at least one tissue culture cell.

Claims 7-8 (canceled)

9. (previously presented) The method of Claim 1, wherein the cell is at least one avian cell.

10. (previously presented) The method of Claim 1, wherein the cell is at least one non-human tissue culture cell.

11. (previously presented) The method of Claim 1, wherein the polynucleotide sequences further comprise at least one isolated and purified RNA molecule.

12. (previously presented) The method of Claim 1, wherein the polynucleotide sequences further comprise at least one synthetic RNA molecule.

13. (previously presented) The method of Claim 1, wherein the polynucleotide sequences further comprise at least one synthetic RNA analog.

14. (previously presented) The method of Claim 1, wherein the polynucleotide sequences are single-stranded.

15. (previously presented) The method of Claim 1, wherein the step of interacting the polynucleotide sequences to the hnRNP A protein further comprises regulating the activity of the hnRNP A protein.

Claims 16-20 (canceled)

21. (previously presented) The method of Claim 1, further comprising the step of determining an effect on RNA processing by monitoring at least one resulting phenotypic characteristic selected from the group consisting of abnormal skin, cell, tissue, organ, vertebral body, neural tissue, skeletal, and limb development.

Claims 22-28 (canceled)

29. (currently amended) A method of modifying an activity of at least one human or avian hnRNP A1 protein within at least one cell comprising the steps of:

introducing into the cell a plurality of RNA polynucleotide sequences comprising consisting essentially of FGFR2 exon 8 sequences capable of binding to the hnRNP A1 protein; and

interacting the RNA polynucleotide sequences with the hnRNP A1 protein within the cell, wherein the RNA polynucleotide sequences compete with at least one endogenous RNA sequence for interacting with the hnRNP A1 protein.

30. (previously presented) The method of Claim 29, further comprising the step of determining an effect on RNA processing by monitoring at least one resulting phenotypic characteristic selected from the group consisting of abnormal skin, cell, tissue, organ, vertebral body, neural tissue, skeletal, and limb development.

Claims 31-55 (canceled)

56. (previously presented) The method of Claim 1, wherein the hnRNP A protein is selected from the group consisting of hnRNP A1 protein, hnRNP A1^B protein, and hnRNP A2 protein.

57. (currently amended) A method of modifying an activity of at least one human or avian hnRNP A protein within at least one cell, which comprises the steps of:

introducing into the cell a plurality of RNA polynucleotide sequences comprising consisting essentially of at least one intronic splicing silencer, wherein

the polynucleotide sequences are isolated and purified RNA molecules, synthetic RNA molecules, or synthetic RNA analogs;

interacting the RNA polynucleotide sequences with the hnRNP A protein within the cell, wherein the RNA polynucleotide sequences compete with at least one endogenous RNA sequence for interacting with the hnRNP A protein; and

altering the splicing of the at least one endogenous RNA sequence.

58. (previously presented) The method of Claim 57, wherein the hnRNP A protein is selected from the group consisting of hnRNP A1 protein, hnRNP A1^B protein, and hnRNP A2 protein.

59. (previously presented) A method of modifying an activity of at least one human or avian hnRNP A protein within at least one cell, comprising the steps of:

introducing into the cell a plurality of RNA polynucleotide sequences comprising at least one intronic splicing enhancer; and

interacting the RNA polynucleotide sequences with the hnRNP A protein within the cell, wherein the RNA polynucleotide sequences compete with at least one endogenous RNA sequence for interacting with the hnRNP A protein.

60. (previously presented) The method of Claim 59, wherein the hnRNP A protein is selected from the group consisting of hnRNP A1 protein, hnRNP A1^B protein, and hnRNP A2 protein.

61. (currently amended) A method of modifying an activity of at least one human or avian hnRNP A protein within at least one cell, which comprises the steps of:

introducing into the cell a plurality of RNA polynucleotide sequences comprising consisting essentially of at least one exonic splicing silencer, wherein the polynucleotide sequences are isolated and purified RNA molecules, synthetic RNA molecules, or synthetic RNA analogs;

interacting the RNA polynucleotide sequences with the hnRNP A protein within the cell, wherein the RNA polynucleotide sequences compete with at least one endogenous RNA sequence for interacting with the hnRNP A protein; and

altering the splicing of the at least one endogenous RNA sequence .

62. (previously presented) The method of Claim 61, wherein the hnRNP A protein is selected from the group consisting of hnRNP A1 protein, hnRNP A1^B protein, and hnRNP A2 protein.

63. (currently amended) A method of modifying an activity of at least one human or avian hnRNP A protein within at least one cell, which comprises the steps of:

introducing into the cell a plurality of RNA polynucleotide sequences comprising consisting essentially of at least one exonic splicing enhancer, wherein the polynucleotide sequences are isolated and purified RNA molecules, synthetic RNA molecules, or synthetic RNA analogs;

interacting the RNA polynucleotide sequences with the hnRNP A protein within the cell, wherein the RNA polynucleotide sequences compete with at least one endogenous RNA sequence for interacting with the hnRNP A protein; and
altering the splicing of the at least one endogenous RNA sequence .

64. (previously presented) The method of Claim 63, wherein the hnRNP A protein is selected from the group consisting of hnRNP A1 protein, hnRNP A1^B protein, and hnRNP A2 protein.